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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,818	07/09/2003	Tsutomu Kanatsu	NEC 198130 DIV	1430

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Norman P. Soloway  
HAYES SOLOWAY P.C.  
130 W. Cushing Street  
Tucson, AZ 85701

EXAMINER
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NGO, HUYEN LE

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/615,818

**Applicant(s)**

KANATSU, TSUTOMU

**Examiner**

Julie-Huyen L. Ngo

**Art Unit**

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-23 is/are pending in the application.
- 4a) Of the above claim(s) 3-6 and 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 and 15-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/9/2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse to prosecute the invention of Species of Second Embodiment readable on claims 7 and 15-23 and Figure 11, in Paper No. filed March 1, 2003 is acknowledged.

Accordingly, claims 3-6 and 8-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Priority***

This application appears to be a division of Application No. 09/613,476 filed on July 11, 2000. A later application for a distinct or independent invention, carved out of a pending application and disclosing and claiming only subject matter disclosed in an earlier or parent application is known as a divisional application or "division." The divisional application should set forth only that portion of the earlier disclosure, which is germane to the invention as claimed in the divisional application.

Applicant is reminded that in order for a patent issuing on the instant application to obtain the benefit of priority based on priority papers filed in parent Application No. 09/613,347 under 35 U.S.C. 119(a)-(d) or (f), a claim for such foreign priority must be made in this application. In making such claim, applicant may simply identify the application containing the priority papers.

***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on July 9, 2003 has been considered by the examiner.

***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

In the description of figure 11, the “main slit 7 and the sub slit 8.”

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features must be shown or the features canceled from the claims. No new matter should be entered.

In lines 4-5 of claim 15, “***a rounded portion slit and an auxiliary slit provided in said TCP,***”

In claim 20, the recitation regarding “the distance” and “the depth”

In claim 23, “recesses provided in said circuit substrate”

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claims 7 and 15-23 are objected to because of the following subject matters:

In claim 7,

Line 6 "*each said TCP*" should be \_\_ \_\_ each of said TCPs\_\_ \_\_ since there is a plurality of TCPs has been recited, also the abbreviated term "TCP" needs to be defined before any abbreviation is introduced.

Lines 9-12, the recitation calling for "*a rounded region between said first region and said second region, and a third region provided in at least one of said first and second region and extending in parallel to the extending direction of said rounded region, said third region having a higher flexibility than that of said at least one of said first and second regions, wherein said third region is provided in said first region and connected to said rounded region.*" is unclear and inconsistent with what being shown in the figure 11. For example, "at least," in line 9, can be construed that the third region is provided in both the first and second regions; however, in lines 11-12, the third region is further defined to be in the first region. Also, it is unclear from the language of the claim which direction is considered to be "*the extending direction of said rounded region*".

In claim 15,

Lines 3-5 "*each said TCP*" should be \_\_ \_\_ each of said TCPs;

Lines 8-9; the recitation calling for “*wherein said auxiliary slit is provided between said rounded portion slit and said display panel and is connected to said rounded portion slit to form a wide common slit*” appears to be inconsistent with what being shown in figure 11 since the *auxiliary slit is part of the rounded portion slit to form the wide common slit.*

In claims 18 and 21, it is unclear which TCP Applicant is referred to as “*said TCP*” since there is a plurality of TCPs recited in claim 7; should it be \_\_ each of said TCPs\_\_?

In claim 23, “said semiconductor driver elements” lack antecedence.

Claims not specifically discussed above are objected as bearing the defect(s) of the claim(s) from which they depend.

Appropriate correction is required.

### ***Allowable Subject Matter***

Claims 7 and 15-23 would be allowable if rewritten or amended to overcome the objections as set forth in this Office action.

### **Reasons for Allowance**

Claim 7 would be allowable since there is no prior art of record that teaches a flat panel display device comprising a circuit substrate held in a hook portion provided on a side surface of said chassis and a plurality of TCP wherein each of said TCPs having:

- a first region extending substantially in parallel to a main surface of said chassis
- a second region extending substantially in parallel to said side surface of said chassis a rounded region between said first region and said second region, and
- a third region provided in at least one of said first and second regions and extending in parallel to the extending direction of said rounded region said third region having a higher flexibility than that of said at least one of said first and second regions

wherein said third region is provided in said first region and connected to said rounded region

Claim 15 would be allowable since there is no prior art of record that teaches a method for manufacturing a flat panel display device comprising the steps of:

- pulling up said circuit substrate by bending each said TCP at a rounded portion slit and an auxiliary slit provided in said TCP such that a lower end of said circuit substrate exceeds a front edge of hook portion provided on said chassis;

- inserting said circuit substrate into said hook portion by returning said auxiliary slit to an original flat state;

wherein said auxiliary slit is provided between said rounded portion slit and said display panel and is connected to said rounded portion slit to form a wide common slit and wherein a bending direction of said common slit in the vicinity of said circuit substrate in the step of pulling up said circuit substrate is opposite to a bending direction of said rounded portion slit in the vicinity of said display panel.

Claims 16-23 would be allowable since they depend on the allowed claim 15.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Adachi et al. (US6104464A) disclose a rigid circuit board for liquid crystal display including cut out for providing flexibility to said board.

Kwon et al. (US6319019B1) disclose a selectively reinforced flexible tape carrier packages for liquid crystal display modules.


Ota (US6402527B2) discloses structure for connecting terminals on wiring board.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (571) 272-2293.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.



**HUYEN NGO  
PRIMARY EXAMINER**